

Hygienic Quality of traditional and industrial yoghurt produced in Qazvin province of Iran

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Background & Aims of the Study: Because of yoghurt is a particular flavor (caused by diacetyl) and appropriate essential oils (from Atanal) as well as enjoy the soft tissue, it is considered as one of the most palatable dairy products. With regards to the yoghurt portion in supplement of protein food needs in our society, it is necessary to ensure its health. In this research the hygienic quality of traditional yoghurt (no licensed) and industrial yoghurt (licensed) during hot and cold seasons (2015-2016) was evaluated. The samples collected from distributed yoghurt in Qazvin province, Iran.

Materials and Methods: In this cross-sectional study, distributed yoghurt in Qazvin province has formed our statistical society. A total of 95 samples hand-picked during hot and cold seasons randomly. Samples were transferred at 4 °C to the laboratory. The microbiological characteristics of the samples were evaluated in accordance with ISIRI 695. Searching for *E. coli* and *Staphylococcus aureus* and also coliforms counting were done according to national standards (ISIRI 5234; ISIRI 6806; ISIRI 5486) by Lauryl Sulfate broth and EC broth, Baird-Parker agar, VRBL agar and Brilliant Green Bile Lactose broth. The YGC agar medium was used for count of fungi (molds and yeasts).

Results: Microbial count showed a significant difference between the traditional and industrial yoghurt samples at the levels which were considered significantly different at $P < 0.05$. The result showed that traditional yoghurt samples are highly contaminated with microbes than industrial ones and within traditional yoghurt samples; There was a noteworthy difference on the fungi totals at warm seasons.

Conclusions: Results have shown that microbial load increase in traditional yoghurt during summer, noticeably. It can indicate poor health conditions in the units, failure to maintain cold chain and inadequate training for vendors dairy products.

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